



### **Status of Operable Unit 1/881 Hillside Groundwater Collection and Treatment**

The Operable Unit 1 (OU 1) - 881 Hillside groundwater collection and treatment system was installed in 1992 and consisted of a 1,435-foot-long French Drain and a separate upgradient Collection Well. The Collection Well collects VOC-contaminated groundwater from within the plume. Trichloroethene is the primary contaminant.

The French Drain was installed to prevent potential downgradient contaminant migration. Collected water was treated in the Consolidated Water Treatment Facility (CWTF). Because groundwater collected by the French Drain was consistently below RFCA Tier II Action Levels, the OU 1 Corrective Action Decision (CAD)/Record of Decision (ROD) included decommissioning the French Drain. The French Drain was decommissioned in 2000. Data are no longer collected at this location.

Based on the declining concentrations of VOCs in the plume, the OU 1 CAD/ROD Modification was signed in February 2001 and included continued extraction and treatment of groundwater from the Collection Well for a one-year period.

Currently, water from the collection well is pumped into a portable trailer, then transported to the CWTF for treatment. The total water volume treated from the collection well was 9,625 gallons for the period January through the end of December 2001. Table 1 presents the volume of water collected monthly.

**Table 1. Volume of Groundwater Collected From the OU 1 Collection Wells**

Month	Volume of Water Collected (gallons)
January	1,010
February	780
March	645
April	745
May	750
June	1,330
July	970
August	940
September	695
October	705
November	645
December	410
Total	9,625

The Collection Well is sampled quarterly. VOC analytes above detection limits from the four 2001 samples are reported below in Table 2. Figure 1 shows the behavior of trichloroethene concentrations relative to time. This graph is the updated version of the graph in the OU 1 CAD/ROD Modification. There was a small spike in trichloroethene concentration in the September sample; however, concentrations did not exceed Tier I

Action Levels. Based on historical data, this increase in concentration is likely attributable to dry conditions, an anomalous laboratory result, or it could be an outlier.

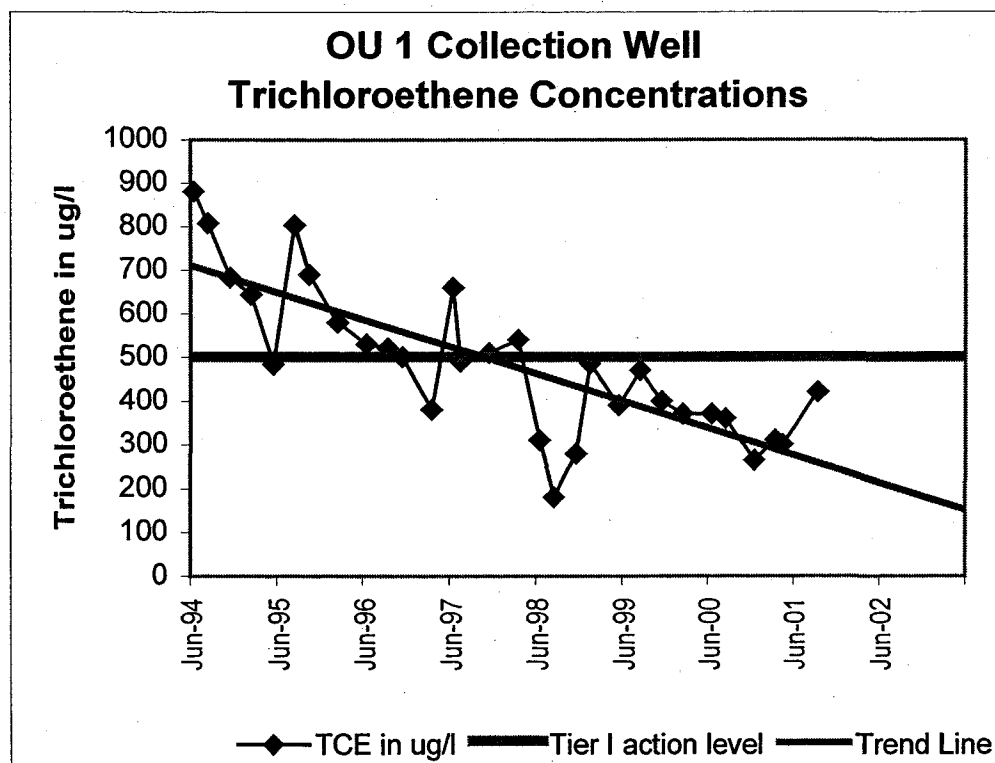
Figure 1 illustrates the general trend of higher concentrations during dryer periods and the overall downward trend.

**Table 2. OU 1 Collection Well Analytical Results for 2001 Sampling Event**

Analyte	Concentration (µg/l)	RFCA Groundwater Tier II Action Levels (µg/l)
1,1,2-Trichlorotrifluoroethane	ND - 3 J	-
1,1-Dichloroethene	10 JD-23	7
1,1,1-Trichloroethane	ND - 3 J	200
Carbon Tetrachloride	10 J -20 J	5
Chloroform	ND - 1 J	100
Methylene Chloride	ND -81 BD	5
Tetrachloroethene	28 - 33	5
Trichloroethene	300 - 420	5

D = Diluted Sample

J = Detected at concentrations below the detection limit for this analysis



**Figure 1. OU 1 Collection Well Trichloroethene Concentrations**

Based on the analytical data, beginning in April 2002, water from the collection well will no longer be collected. This is consistent with the modified CAD/ROD, which states that the collection well will be operated for one year after the signing of the final modification (DOE 2001). Also per the modified CAD/ROD, monitoring of the collection well will continue in order to verify that levels stay below RFCA Tier I Action levels.